



"Improving Air Quality in Indian Cities"

Collective inputs from over 335,000+ Citizens on

"Swachh Bharat"

(Current state, Issues, Root Causes and Proposed Solutions)

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Improving Air Quality in Indian Cities

Executive Summary

The air quality in Indian cities has been deteriorating over the last year with 14 of world's most polluted 20 cities being in India and Delhi being the most polluted city in the world. On the bright side, India has recently launched a National Air Quality Index (AQI which will provide details of air quality and information on its likely health implications for city dwellers. This having been done, there is still a lot to be desired.

The 335,000+ strong "Swachh Bharat" online community has come together to collectively identify the key issues, root causes and solutions for Improving Air Quality in Indian Cities and the community expects that the Government will work towards implementing the identified solutions.

Issues & Root Causes Identified:

- 1. Emission of smoke from vehicles
- 2. Smoking in public areas
- 3. Waste is burnt on roads by municipal workers
- 4. No cap on the number of car that hit the road every month/year
- 5. Lack of stringent pollution check norms for vehicles on road
- 6. Trucks that are over 20 years old are still playing on Indian roads
- 7. Adulterated fuel is sold at many petrol pumps
- 8. A huge amount of fireworks are burnt during festival time and in marriages
- 9. Usage of pesticide and DDT
- 10. Many industries are still operating around residential areas
- 11. People are not aware the burning waste leads to the formation of many toxic gases
- 12. Too much dust on the roads
- 13. Uncovered construction sites
- 14. Municipal corporations do not cover the dug up roads
- 15. No strict law against creating pollution
- 16. Deforestation that has taken place to make room for urbanization
- 17. There has been a massive increase in houses/ buildings in urban areas in last decade
- 18. Lack of concentration on renewable sources of energy
- 19. Increase in carbon footprint due to floating population in the cities
- 20. Construction materials are not stored properly
- 21. Factories on outskirts do not treat their generated air
- 22. Diesel Generators are very inefficient and generate fumes





Solutions Identified:

- 1. Vehicles not having a pollution-under-control certificate should be caught and challaned and 3 violations of the same vehicle should lead to confiscation.
- 2. Vehicles emitting visible pollution should be fined instantly and amount of fine should be steep
- 3. Latest Euro/Bharat norms in vehicle manufacturing should be strictly adhered to
- 4. Fuel should be given to vehicles only after checking the pollution under control certificate
- 5. Development of efficient and comparatively cheap public transport system will discourage people from using their personal vehicles on roads
- 6. Visible time-clocks should to be installed at red lights in all cities
- 7. A by-pass road should be created around every city so that the commercial vehicles do not need to go inside the cities to pass through
- 8. Use of CNG should be popularized
- 9. Diesel vehicles which are more than 15 years old should be banned
- 10. Vehicles carrying cement/sand and waste should be completely covered and heavy a penalty should be imposed for non-compliance
- 11. Industries/factories should not be allowed to operate in or near residential areas
- 12. Stringent caps should be put on the chemical emissions during various industrial processes
- 13. Waste should be put in the Municipal dumps and should not be burnt on the roads.A fine should be imposed on burning the waste in cities
- 14. Construction sites should be completely covered to prevent dust from spreading
- 15. Focus should be increased on producing Solar and Wind energy instead of the continuous use of the non-renewable sources
- 16. Corporations and Municipalities should tender contracts for mechanised street cleaning in all the cities
- 17. Planting trees should an important concern to lower the pollution rate in the city
- 18. A steep fine should be imposed on smoking in public areas and if possible smoking must be banned
- 19. Only select low pollution fireworks should be permissible during festivals and marriages
- 20. During festival time, firework shows, away from the cities in large play grounds could be organized so impact on city air quality is minimum.





Improving Air Quality in Indian Cities–A few Citizen quotes:

- I would say rather have Green Vehicle and promote Green Vehicle like battery operated vehicle. Green Fuel like CNG should be cheaper but the Government has increased CNG prices up to rs50 per kg which started at Rs9.50 per kg when it first started in Mumbai more than 10 years ago. How will people change to green fuel if encouragement is not given to city consumers? The fuel and electricity is available in plenty in cities and can make a huge difference to pollution. As in Mumbai and most of the cities Taxi and Auto Rickshaw have converted to CNG – *Ayaz Manjee*
- First and foremost is to change the mind-set of the citizens. Need to develop awareness on clean air and its importance for healthy life. ICT tools may effectively use for the same. Nukkad natak, Puppet shows, small documentaries may develop on the issue – *Anuoam Dixit*
- 3. The emission rates of automobiles have to be kept in control. Anybody violating the pollution control norms are to be got penalized. Particularly, auto rickshaws, water tankers, garbage vans, sand lorries, gas cylinder trolleys, mineral water trolleys emit more smoke than 4 wheeler and 2 wheeler. Period checking by squads on busy roads to be done *M K Sanka*
- Cleaning of roads and any maintenance work should be done at night shift when vehicle movement is very low. Municipality staff should do night duty instead of Day duty. It is very much required to do proper cleaning work – *Chiranjib Bannerjee*
- 5. Two wheelers are a major source because of the sheer numbers involved. They need to be tackled differently. Improving public transport/no car/scooter day can be considered. Fireworks are another major source of pollution-banning sale to individuals can be considered-have a centralised display as in so many other countries. This will have a beneficial spin off in that rampant child labour can be curbed. *Annam Gupta*
- 6. It is very difficult now days to live in city zone due to heavy Vehicle pollution, sewage disposal and Sewage water. Firstly, we are frequently talking about greenery plantation in and around house for that we required little sufficient water. Now days it's hardly get the water in summer season. So every house has to ensure and do mandatory implementation of rain water harvesting in India *Aravind Kumar*
- No checks seems to have been carried out on public transports like buses, trucks etc. The polluting gases emitted by these vehicles is so much it is better condemn these transports before it is too late - *Madhava Shenoy*